

## ABSTRACT

The welding state detecting and transmitting device 40 is provided with a secondary battery 60 for accumulating power to be supplied to components within the device 40, a charging circuit 58 that utilizes a portion of the welding current to charge the secondary battery 60. A toroidal coil 42 is used for charging the secondary battery 60 with welding current. The toroidal coil 42 is attached to secondary side conductor 32 and connected with the charging circuit 58. The device 40 wirelessly transmits data relating to the welding current detected by the toroidal coil 46. The device 40 substantially reduces the burden of maintenance of the device 40 required in prior art such as replacing a primary battery or recharging a rechargeable battery periodically.